

**Oak Creek Property Owners Wastewater Treatment Plant  
Aquifer Protection Permit No. P-101748  
Place ID 575, LTF No. 81995  
Significant Amendment**

## **I. Introduction:**

The Arizona Department of Environmental Quality (ADEQ) proposes to issue an Aquifer Protection Permit (APP) for the subject facility that covers the life of the facility, including operational, closure, and post-closure periods unless suspended or revoked pursuant to Arizona Administrative Code (A.A.C.) R18-9-A213. The requirements contained in this permit will allow the permittee to comply with the two key requirements of the Aquifer Protection Program: 1) meet Aquifer Water Quality Standards (AWQS) at the Point of Compliance (POC); and 2) demonstrate Best Available Demonstrated Control Technology (BADCT). BADCT's purpose is to employ engineering controls, processes, operating methods or other alternatives, including site-specific characteristics (i.e., the local subsurface geology), to reduce discharge of pollutants to the greatest degree achievable before they reach the aquifer or to prevent pollutants from reaching the aquifer.

## **II. Permittee & Facility Location:**

The facility is located at 980 N. Spring Creek Trail, in Cornville, in Yavapai County, Arizona.

**Permittee:** AOPVCO LLC  
855 N Spring Creek Trail  
Cornville, AZ 86325

## **III. Facility Description:**

The permittee is authorized to operate the Oak Creek Property Owners Association (OCPOA) Wastewater Treatment Plant (WWTP) with a maximum monthly average flow of 30,000 gallons per day (gpd). The WWTP process consists of headworks with bar screen, flow equalization tank, extended aeration system consisting of anoxic and aeration tanks, a clarifier, a filter, UV disinfection, chlorination, and sludge holding tank. The effluent is discharged to two unlined evaporation/percolation ponds designed for evaporation/percolation of 40,000 gpd. The sludge is hauled off-site for management or disposal in accordance with state and federal regulations. Depth to groundwater at the site is about 25 feet and the direction of groundwater flow is to the south-southwest.

## **IV. Amendment Description:**

The purpose of this amendment is to:

- Change the permittee from Oak Valley Property Owners Association to AOPVCO LLC
- Update of the closure and post closure-cost and financial assurance mechanism
- Update the facility description to include the chlorination after the UV disinfection unit. The facility was chlorinating the effluent without a permit approval. Under this amendment, the facility is adding the chlorination process.

- Remove the monitoring requirements for Point of Compliance (POC) #1 well and add a conceptual POC location in the permit. The existing POC well requirements were evaluated which resolving the compliance issues and it was determined that the groundwater monitoring is not required for this site due to smaller design flow of WWTP.

The permit category for this amendment was determined to be a “Significant Amendment” per A.A.C. R18-9-A211(B)(4) because of less stringent monitoring that reduces the number of pollutants to be monitored.

## **V. Regulatory Status**

- Oak Creek Valley Property Owner’s Association, received a Consent Order, Docket No. APP-05-19 dated July 3, 2019, for using chlorine disinfection as a backup, and failure to perform maintenance of the Point of Compliance well.
- This amendment is in response to a Consent Order, Docket No. APP-05-19 dated August 10, 2017 to add chlorination description in the permit, to remove the POC well and groundwater monitoring requirements and to change the Oak Creek Valley Property Owner’s Association as a permittee.

## **VI. Best Available Demonstrated Control Technology (BADCT):**

The treatment facility shall be designed, constructed, operated, and maintained to meet the treatment performance criteria for existing facilities as specified in A.A.C. R18-9-B205. The wastewater includes domestic and restaurant discharges. Wastewater is discharged to a single-lined evaporation pond and is pre-treated by an oil/water separator prior to discharge to the pond.

## **VII. Compliance with Aquifer Water Quality Standards (AWQS):**

To ensure that site operations do not result in violation of Aquifer Water Quality Standards at the POC, representative samples of the effluent are collected from the point of discharge from the UV disinfection unit and are monitored monthly for fecal coliform and total nitrogen, quarterly for metals, semi-annually for volatile and semi-volatile organic compounds.